

Replication Problems

- We assume published results are true
- Are they?
- One lab tried to replicate a bunch of cog experiments
- Only 50 percent replicated in cognitive psych
- 25 percent in social

Possible Replication Failure Causes

- Original was a fluke?
- Original was falsified?
- P hacking?
- Not reporting all experiments/analysis?
- Results are not generalizable?

Original was a fluke

- Many experiments run across universities
- Around 130 R1 universities
- Have around 15 labs each
- P values based on probability
- Some experiments show results by fluke
- Discuss with group. Do you believe this is the or a cause?

Original was falsified

- Authors lied about their data
- Reported completely made up data
- Discuss with your group

P hacking

- Keep modifying analysis till it works
- Recognition better in a cool room-> no effect
- Within subjects
- Exclude participants with bad score
- Change how recognition measured
- Hits minus false alarms
- D prime
- Percent correct
- Or keep adding to sample till significance

P hacking

- Looking to show that people in a tip of the tongue state cannot report what the answer sounds like
- How do we code “what it sounds like”?
- One syllable?
- One phoneme?
- Two phonemes?
- We could keep changing it till we get the desired result.

Results not generalizable

- Findings are extremely hard to pick up
- Exact circumstances
- Testing effect: test yourself better than restudy
- Only with short answer?
- Only for easy questions?
- Only for memorization?
- Only with certain delay?